



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,927	12/10/2003	Moo Ryong Jeong	M-15392 US	8607
32605 7590 05/28/2008 MACPHERSON KWOK CHEN & HEID LLP 2033 GATEWAY PLACE SUITE 400 SAN JOSE, CA 95110				
EXAMINER				
IQBAL, KHAWAR				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
05/28/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/733,927

Applicant(s)

JEONG ET AL.

Examiner

KHAWAR IQBAL

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3-31-08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 27-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 1-2, 6-7, 12-13 and 18, the phrase "possibility" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Regarding claim 8 the phrase "could be" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

Regarding claim 22, the phrase "adapted" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9, 11-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al (20040039817).

Regarding claim 1, Lee et al teaches a method of enabling channel scanning in a wireless station (wireless station, fig. 8), said method comprising (fig. 8):

receiving from an access point (access point, fig. 8) data provided to indicate a possibility of regulatory domain change (para. # 0030, 0038); and

after a connection with the access point is terminated selecting a channel scanning method based upon said data (para. # 0066).

Regarding claim 2 Lee teaches wherein said data indicates whether there is a possibility of domain change (para. # 0030, 0038).

Regarding claim 3 Lee teaches wherein said data is based on geographic information of the access point (para. # 0037-0038 and 0061).

Regarding claim 4 Lee teaches wherein said data is based on proximity information of the access point related to a predetermined point (para. # 0047-0048, 0064-0066).

Regarding claim 5 Lee teaches wherein said data is based on maximum coverage area and geographical information of the access point (para. # 0032, 0047-0048, 0051-0054, 0064-0066).

Regarding claim 6 Lee teaches wherein said selecting a channel scanning method comprises selecting a safe channel scanning method if there is a possibility of regulatory domain change (para. # 0048, 0072-0075).

Regarding claim 7 Lee teaches wherein said selecting a channel scanning method comprises selecting an active channel scanning method if there is no possibility of regulatory domain change (para. # 0032, 0035-0037).

Regarding claim 8 Lee teaches a method of enabling channel scanning in a wireless station (wireless station, fig. 8), said method comprising:

establishing communication between said wireless station (wireless station, fig. 8) and an access point (access point, fig. 8) (para. # 0023);

receiving information in a lifetime field provide to a period of time during which regulatory domain information could be used after the communication between said wireless station and said access point has been lost (para. # 0038 and 0066); and determining whether an elapsed period of time after the communication between said wireless station and said access point has been lost is greater than the period of time in said lifetime field (para. # 0066, 0038-0040).

Regarding claim 9 Lee teaches wherein said receiving information comprises obtaining the shortest distance from a regulatory domain boundary to an edge of the coverage area of the access point (para. # 0046).

Regarding claim 11 Lee teaches further comprising selecting a safe channel scanning method if the elapsed period of time is greater than the period of time in said lifetime field (para. # 0030, 0051, 0064-0067).

Regarding claim 12 Lee teaches further comprising determining whether there is a possibility of regulatory domain change (para. # 0030, 0038).

Regarding claim 13 Lee teaches further comprising performing safe channel scanning if there is a possibility of regulatory domain change (para. # 0030-0038).

Regarding claim 14 Lee teaches a method of enabling channel scanning in a wireless station, said method comprising (figs. 8):

determining if a channel of a plurality of available channels is a domain-independent channel (para. # 0028-0030); and

actively scanning the domain-independent channel (para. # 0028-0030).

Regarding claim 15 Lee teaches further comprising receiving a pre-alert field (para. # 0030, 0051, 0064-0067).

Regarding claim 16 Comp teaches further comprising performing an active channel scan if valid regulatory domain information is identified during scan of the domain-independent channel (para. # 0028-0030).

Regarding claim 17 Lee teaches a wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising (fig. 8):

a receiver for receiving a data block, wherein said data block comprises a regulatory domain change pre-alert field (para. # 0037-0040, 0064-0067 and 0071-0073);

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said domain change pre-alert field (para. # 0037-0040, 0064-0067 and 0071-0073); and

a transmitter coupled to said controller (para. # 0037, fig. 8, mobile, wireless terminal or PDA) (a processor for selecting an AP based on the signal strength and channel loading information).

Regarding claim 18 Lee teaches wherein said domain change pre-alert field comprises a bit indicating whether there is a possibility of regulatory domain change (para. # 0037-0040).

Regarding claim 19 Lee teaches wherein the transmitter transmits a probe frame if said regulatory domain change pre-alert field is not set (para. # 0037-0040).

Regarding claim 20 Lee teaches wherein said domain change pre-alert field is sent in a beacon frame (para. # 0037-0040).

Regarding claim 21 Lee teaches wherein said domain change pre-alert field is sent in a probe response frame (para. # 0037-0040).

Regarding claim 22 Lee teaches a wireless station adapted to scan for channels in a wireless communication network, said wireless station comprising (fig. 8):

a receiver for receiving a data block, wherein said data block comprises a lifetime field related to the extent of a regulatory domain (para. # 0050-0054, 0062-0067);

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said lifetime field; and a transmitter coupled to said controller (para. # 0050-0054, 0062-0067, 0071-0074 para. # 0037, fig. 8, mobile, wireless terminal or PDA, a processor (controller) for selecting an AP based on the signal strength and channel loading information).

Regarding claim 23 Lee teaches wherein the controller selects a safe channel scan method if said lifetime field has expired (para. # 0050-0054, 0062-0067).

Regarding claim 24 Lee teaches wherein said lifetime field is based upon a maximum handover time (para. # 0037, 0050-0054, 0062-0067).

Regarding claim 25 Lee teaches wherein said lifetime field is based on a shortest distance from a regulatory domain boundary to an edge of the coverage area of an access point (para. # 0050-0054, 0062-0067, 0071-0074).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (20040039817) and further in view of Toshimitsu et al (7006456).

Regarding claim 10 and 26 Lee does not specifically teach obtaining speed of said wireless station.

In an analogous art, Toshimitsu et al teaches teach obtaining speed of said wireless station (col. 25, lines 1-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Lee teaches by specifically adding features obtaining speed of said wireless station, radio mobile station simplifies a control of hand-over process and improves communication efficiency and attains high reliable radio communication system taught by Toshimitsu et al.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is (571)272-7909. The examiner can normally be reached on 9 am to 6.30 pm Monday to Thur.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

/K. I./  
Examiner, Art Unit 2617